1. **GENERAL**
   1. **Requirements Include**
      1. Glass and glazing.
   2. **Related BCIT Sections**
      1. 08 11 00 Metal Doors and Frames.
      2. 08 14 00 Wood Doors.
      3. 08 41 13 Aluminum Framed Entrances and Storefront.
      4. 08 44 13 Glazed Aluminum Curtain Walls.
      5. 08 50 00 Windows.
2. **ADMINISTRATIVE AND SUBMITTAL REQUIREMENTS**
   1. **BCIT Submittals and Notifications**
      1. Samples: Submit three 300 mm (12 in.) square samples of each type of glass specified are to be provided to BCIT.
3. **QUALITY ASSURANCE**
   1. **Mock-Ups**
      1. Specify mock-ups to verify selections and to demonstrate aesthetic effects and qualities of materials and execution.
      2. Mock-ups are to be constructed with glass and glazing systems specified, including typical lite size, framing systems and glazing methods, and accessories, including air barrier, membrane flashing and metal flashing.
      3. Review mock-ups.
      4. Mock-ups are to be maintained during construction in an undisturbed condition as a standard for judging the completed work. Accepted mock-ups may become part of the completed work if undisturbed at the time of Substantial Completion.
   2. **Warranty**
      1. Provide Fabricator’s five (5) year warranty from date of manufacture on all glazing and insulated units.
4. **PRODUCTS**
   1. **Manufacturers**
      1. Confirm acceptable glass manufacturers with BCIT.
   2. **Glass Materials**
      1. Glass:
         1. Low E coating to be provided by PPG Industries or Guardian Industries or approval by BCIT.
         2. Wire (Georgian) glazing is not preferred.
         3. Fire rated glass to be provided for vision lites in fire doors and exit doors.
         4. Glazing at grade or accessible to grade to be laminated for security.
         5. All monolithic glass to be tempered and minimum 12 mm (½”) thick.
         6. Provide tempered laminated glass for all glazing applications that provide acoustic separation between rooms.
         7. Structural interlayers are to be used for the following applications, including minimally supported glass constructions, overhead glazing, glazed structural guardrail systems and glazed fall protection applications.
         8. Exposed exterior laminated glass to have a UV stabilizer interlayer to avoid yellowing.
         9. All interior vision glazing to be low-iron glass.
         10. Exterior single glazed units are not to be used.
         11. Insulated glass units accessible from grade are to have the exterior lite laminated with a structural interlayer for security and acoustic separation.
         12. The minimum glass lite thickness within an insulated glass unit is to be 6mm.
      2. Spacers:
         1. Spacers to have warm edge spacer.
         2. For aesthetic reasons use of black primary and secondary sealants is highly recommended, with a black anodized aluminum spacer or black Vitrum UltraBar™ Plus.
   3. **Glazing Films**
      1. Consider window films for interior glazing.
         1. Confirm type of film, level of required privacy, and extent/sizes with BCIT.
         2. Acceptable brand and finish:
            1. 3M Matte Film.
            2. Newco Solar Solutions, Silver 20.
            3. Alternatives will be considered.
         3. Not to be applied to sealed units.
   4. **Tolerances**
      1. Tempered Glass Fabrication Tolerances:
         1. Glass to be annealed, heat-strengthened, fully tempered or heat soaked and fully tempered as required to meet all applicable codes and/or thermal stress and wind loads.
         2. Heat Treated Glass to be horizontally processed with inherent roll wave distortion pattern parallel to the bottom edge of the glass.
         3. Maximum bow and warp 1/32 in. per lineal foot (0.79 mm).
         4. Each lite of coated, tinted and reflective glass to have a maximum peak to valley roller wave +/- 100md (millidiopter) over 95% of the glass surface.
      2. Insulated Glass Units – Fabrication Tolerances:
         1. Gaps or skips between primary and secondary sealant are permitted to a maximum width of 1.59 mm (1/16 in.) by a maximum length of 51 mm (2 in.) with gaps separated by at least 457mm (18 in.).
         2. Ensure lites are separated by a desiccant filled spacer bar with bent corners and straight key joints, providing a hermetically sealed and dehydrated space.

\*\*\* END OF **GLAZING** SECTION \*\*\*